

Six new Taxa of Flacourtiaceae from India and Burma

BY

N. MUKHERJEE

B. N. College, Itachuna, Hooghly, West Bengal

(With a text-figure)

INTRODUCTION

In course of the revision of the family Flacourtiaceae of India, Burma and Ceylon the author noted a number of interesting herbarium sheets at Central National Herbarium, Botanical Survey of India, Calcutta (CAL), Herbarium of Forest Research Institute, Dehra Dun (DD), Herbarium of Southern Circle, B.S.I., Coimbatore (MH) and Herbarium of Eastern Circle, B.S.I., Assam (ASSAM), some of which form the basis of the present paper.

***Homalium ciliatum* sp. nov.**

H. ciliatum Debb. in Kanjilal and Das, Fl. Assam 1 : pt. 2 (i) 1934-nomen.

Affinis *H. bhamoense* Cubitt et Smith sed foliis subcoriaceis, acutis ad basin, acuminatis ad apicem; inflorescentis ad 10 cm longis; flores in glomerulis 5-8 floris inter alia differt.

Typus lectus a U. N. Kanjilal in montibus Garo in Assamia die 4 martii 1931 et positus in ASSAM sub numero 5221.

Tall tree; bark ashy-grey, outside fairly plain, inside dun-brown, rather coarsely granular; branches horizontal, covered with white hairs; branchlets with white lenticel. *Leaf* oblong-lanceolate, margin distantly crenate, upper surface glabrous, lower surface pubescent, base acute, apex acuminate, lateral nerves 8-9 pairs, veins not prominent above, subcoriaceous, 8-12.50 cm by 4.20-5 cm, petiole 5-8 mm long, puberulous, *Inflorescence* axillary raceme, drooping, puberulous, up to 10 cm long. *Flower* in 5-8-flowered glomerules, 2.5-mm long; pedicel 1.5 mm long, puberulous. *Sepals* 6-7, in turbinate tube, 1 mm long minutely hairy outside, linear, margin ciliate. *Petals* same as sepal but slightly larger and oblong. *Stamens* 6-7, one opposite each petal and exceeding them in length, filament filiform, glabrous, anther oblong

short; staminodes alternating with stamens, much shorter, hairy. Ovary half-inferior, free portion hairy, ovate, one-chambered; styles mostly 4, filiform, forming a crown at the top of the ovary.

Assam: Garo hill, near mile post no. 11 *Kanjilal* 5221 (ASSAM).

This species is nearest to *H. bhamoense* Cubilt et Smith, but it differs from the latter in having subcoriaceous leaf with acute base and acuminate apex; inflorescence up to 10 cm long; flowers in 5-8 flowered glomerules. It was named as *H. ciliatum* Debb., but was never described.

***Scolopia burmanica* sp. nov.**

Text-fig.

Affinis *S. kermodei* Fischer sed foliis coriaceis, oblongolanceolatis, breviter acuminatis ad apicem; filamentis 8-10 mm longis, antheris linearibus; floribus in inflorescentis laxis; fructu globosis inter alia differt.

Typus lectus a Mg Ba Pe in via Prome prope Rangoon in Birmania die 11-2-1932 et positus in herbario instituti Forestalis ad Dehra Dun subnumero 13080.

Tree 9-14 m high, stem spinous, spines 2-3 cm long. *Leaf* oblong-lanceolate, coriaceous, lower surface glabrous, upper surface glaucous, apex shortly acuminate, base acute, distantly serrate, 15.50-20.20 cm by 3.60-5.60 cm; 8-9 pairs of lateral nerves, reticulations not so prominent; petiole 9-12 mm long, with a pair of glands at the apex. *Inflorescence* axillary raceme, 4-6 cm long. *Flower* white, 4-8 mm diameter; pedicel articulated, 12-18 mm long, glabrous. *Sepals* 8, lanceolate, glabrous with ciliate margin, fleshy, 2 mm long, connate at the base. *Petals* 8, same as sepal but a little broader. *Stamens* many, filament 6-9 long, glabrous, anther linear, 1.5-2 mm long, with glabrous connective; disc-gland thick. *Ovary* ovoid, style 4 mm long, stigma flat with crenate margin. *Fruit* globose, 2.5 cm diam., smooth with persistent sepal and style.

Fl.-Feb. Fr.-May.

Lower Burma: Prome Rd., Rangoon *Mg Ba Pe* 13080 (DD); Prome Rd., Rangoon *Parkinson* 14431 (DD).

I found two herbarium sheets within the lot of sheets of *S. spinosa* (Roxb.) Warb. in the herbarium of F.R.I., Dehra Dun; one of which was sent to the Kew herbarium for identification where it was remarked that it was not *S. spinosa*. The specimen differs from *S. spinosa* in having eight glabrous sepals, glabrous connective of anther and larger leaf with serrate margin. It differs also from *S. kermodei* Fischer in having globose fruit; coriaceous, oblong-lanceolate leaf,

8-10 mm long filament of stamen, linear anther. The characters shown in the present report are distinctive and justify the creation of new species.



Text-fig. *Scolopia burmanica* sp. nov.

A. A twig with inflorescence ; B. A flower ; C. A stamen.

***Casearia sikkimensis* sp. nov.**

Affinis *C. graveolens* Dalz. sed foliis membranaceis, marginibus distanter serratis, pedicellis non-articulatis, palum pilosis, staminodis filiformibus, filamentis aequilongis ; fructu globosis inter alia differt.

Typus lectus a J. S. Gamble in Dhobijhua ad Kurseong mense aprili anni 1882 et positus in CAL subnumero 10316.

Large tree ; branches glabrous ; bark lenticellate. *Leaf* lanceolate or oblong-lanceolate, distantly serrate or entire, apex shortly acuminate, base acute sometimes cuneate, membranous, glabrous, 5-7 pairs of lateral nerves, slightly oblique, reticulations not so prominent, 5.60-12.50 cm by 2.51-4.71 cm, stipule early caducous ; petiole 0.6-1.2 cm long, glabrous. *Flower* in axillary cluster, much crowded ; 1.5 mm diam., glabrous ; pedicel slightly hairy, 5-8 mm long, not articulated at the base ; bract 1 mm long, ovate, laxly pilose. *Sepals* 5, almost ovate, apex acute, 2.5 mm long, outer surface tomentose, inner glabrous, margin ciliate. *Stamens* 7-8, slightly united at the base, filament hairy, 2 mm. long, anther ovate, basifixed, staminode filiform, slightly narrowed to the apex, hairy, equal in length to the filament. *Ovary* conical, glabrous, 1 mm long, 1-2 ovules on each placenta ; style 0.5 mm long, stigma discoid. *Fruit* globular, 8-10 mm diam. ; seeds 3-4, ovate and slightly compressed.

Fl.-Apr. Fr.-Oct.

Bengal : Dhobijhua 6000', Kurseong *Gamble* (CAL), 10316 Sepoydura 5000', Darjeeling *Gamble* 6875 (DD) ; Rangirum 6000', Darjeeling *Gamble* 6881C (DD) ; Sikkim, without locality *King* 944 (CAL) ; Mahalderum 2500', Sikkim *Anderson* 66 (CAL) ; Tongloo 6000', Sikkim *Kurz* (CAL) ; Assam : Naga Hill *Bor* 20873 (ASSAM) ; Dumlep forest, Khasi Hill *DAS* 10208 (ASSAM).

There are two specimens in Central National Herbarium, collected by *Gamble* from Dhobijhua, Kurseong, and identified up to genus *Casearia*. There are some other specimens and all these specimens are kept with *C. tomentosa* Roxb. as being similar to the latter. But critical examination shows that the former specimens differ from Roxburgh's species in having smaller leaves, lesser number of lateral nerves, non-articulated pedicel, filiform staminode and globular fruit. On the other hand, this species has got some similarity with *C. graveolens* Dalz., but the lanceolate, membranous leaf, acute leaf base, globular fruit favours separation of the former from the latter as a new species.

Casearia rubescens Dalz. var. *gamblei* var. nov.

Foliis late lanceolatis, ad apicem acuminatis, nervis lateralibus 9-11 jugis.

Typus lectus a T. F. Bourdillon ad Peermerd et positus in CAL subnumero 181.

South India : Evergreen forest of Pirmed 3500' *Bourdillon* 181 (CAL) ; North Canara without locality *T. R. Bell* 6013 (CAL).

This variety differs from the type variety, *C. rubescens* Dalz. var. *rubescens* in having broadly lanceolate leaf, acuminate apex and 9-11

pairs of lateral nerves. The type variety has ovate-oblong leaf, obtusely acuminate apex and 6-8 pairs of lateral nerves. Gamble (1920) remarked 'this specimen collected by Bourdillon No. 181 from evergreen forests at Peermerd, which, I think is a form of *C. rubescens* Dalz. with more lanceolate leaves than the Bombay plant.' A critical examination shows that it differs from the type variety in other characters and deserves separation as a new variety.

***Scolopia crenata* (Wight) Clos var. *brevifolia* var. nov.**

Foliis 4-8 cm longis et 1.5-2 cm latis, hand obliquis ad basin, pedicellis brevibus, 2 mm longis.

Typus lectus a Sebastine ad Courtallum in Tinnevelly et positus in MH subnumero 5881.

South India: Tinnevelly dist., Courtallum *Sebastine* 5881 (MH); Trichinopoly, Salur to Vallarum *Subramanium* 13031 (MH).

This variety differs from the type variety, *S. crenata* (Wight) Clos var. *crenata* in having leaf up to 8 cm long and 2 cm broad, leaf base being not oblique and short pedicel, 2 mm long. The type variety has leaf 9-15.50 cm by 2.50-6.30 cm; oblique base; pedicel 4-6 mm long. The specimens have been compared with the photograph of the type of *S. crenata* (Wight) Clos received from Kew herbarium.

***Hydnocarpus kurzii* (King) Warb. spp. *australis* Sleum. forma *latifolia* forma nov.**

Foliis multo latis, 9.20 cm breviter acuminate ad apicem.

Typus lectus a S. Kurz ad Pegu in Birmania et positus in CAL subnumero 532.

Lower Burma: Pegu without locality *Kurz* 532 (CAL); Waykon steam, Mawlaik *J. chin* 51. *B.I.* (DD).

This form differs from *H. kurzii* (King) Warb. spp. *australis* Sleum. in having broader leaf, more than 9.00 cm. The breadth of the leaf of the sub-species has been found to be up to 8.00 cm. So this single character variant has been given the rank of forma.

ACKNOWLEDGEMENTS

I am grateful to Dr. S. K. Mukherjee, Ex-Keeper, Central National Herbarium, B.S.I., Calcutta, for his assistance in the preparation of this paper and to the Late Rev. Father Dr. H. Santapau, S.J., Ex-Director, Botanical Survey of India, Calcutta, for the Latin diagnosis.